USIB-D-41.14/32
(COMOR-D-13/8)
18 April 1963

UNITED STATES INTELLIGENCE BOARD

MEMORANDUM FOR THE UNITED STATES INTELLIGENCE BOARD

SUBJECT: Protection of Satellite Reconnaissance Vehicles

The Committee on Overhead Reconnaissance has agreed that the attached paper would be useful to the National Reconnaissance Office, and therefore recommends that USIB authorize forwarding it to NRO for use as appropriate. It relates directly to the first recommendation of the paper on "Requirements for Collection by Satellite Image-Forming Sensors" (USIB-D-41.14/28; COMOR -D-13/4).

25X1

Executive Secretary

Copies 2, 3   State TCO
           4   DIA (D/NIC)
           5   DIA   25X1
6, 7 ,8 ,9   DIA TCO
          10   OACSI TCO
     11, 12   ONI TCO
     13, 14   AFNIN
     15, 16   NSA
     17, 18   NRO
          19   AEC
          20   FBI

NRO review(s) completed.

25X1
25X1

Copy 36 of 84

GROUP 1
from automatic
and declassification

USIB-D-41.14/32
COMOR-D-13/8

PROTECTION OF SATELLITE RECONNAISSANCE VEHICLES

1. There is a need to include in the research and development program
for reconnaissance satellites means of reducing their vulnerability to
interdiction by Soviet anti-satellite weapons systems. NIE 11-3-62 pro-
vides the agreed community opinion that a potential threat to satellites
exists at the present time. NIE 11-3-62 also estimates that the Soviets
might be engaged in the development of a specific anti-satellite missile
system, possibly in conjunction with their ABM program.

2. The current threat is based on the concept that the Soviets could
launch an IRBM or an MRBM on such a trajectory as to intercept a satellite
in orbit at or near the apogee of the intercepting missile. Sufficient
orbital data would have to be acquired to permit prediction of the inter-
cept point prior to launching the intercepting missile and would probably
involve radars and tracking facilities from other systems or programs. Be-
cause in most cases the intercepting missile would have to be launched prior
to the appearance of the satellite above the horizon, this technique is often
called "blind firing". Such a system would probably require the use of a
nuclear warhead.

3. Development of a specific anti-satellite missile system, while some
time in the future, e.g. 1965-1966, is visualized as a system having the
capability to make an interception on an early, perhaps the first, orbit
within range.

25X1

2

TOP SECRET

USIB-D-41,14/32
COMOR-D-13/8

4. The need for reducing the vulnerability of reconnaissance satel-
lites is expected to vary both in terms of the type of mission and in terms

of international tension at the time. For example, the use of a reconnaissance

satellite in times of crisis for indication of hostilities might be more

likely to be subject to interception than "routine" surveillance vehicles in

times of relative calm.

5. The research and development program should include efforts to reduce

the vulnerability of satellite reconnaissance vehicles by various means, e.g.

25X1
NRO

This work must be accomplished prior to the first "incident"

in which a Soviet intercept is attempted in order to preclude a long period

in which satellite reconnaissance would be unavailable.

25X1

TOP SECRET

25X1

TOP SECRET

USIB-D-41.14/32
COMOR-D-13/8

Copy 1	DCI TCO for USIB/S
21 ,22	Asst/OPS(NPIC)
23	C/PSD(NPIC)
24	C/PID(NPIC)
25	C/CSD(NPIC)
26	LS/PID(NPIC)
27	TSO CIA
28,29	DDI TCO
30, 31	OSI TCO for CIA COMOR Member
32, 33	OSI TCO
34	OCI TCO
35	ONE TCO
36	ORR TCO
37	DDP TCO
38	DDR TCO
39	AD/OSA
40	D/FA/OSA
41	Intel /OSA
42	SO/OSA
43	SAL/OSA
44 - 58	USIB/S
59 - 84	SA/DDR

TOP SECRET